

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 11:59:18 ON 17 APR 2008

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY SESSION

FULL ESTIMATED COST

0.42

0.42

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 12:00:36 ON 17 APR 2008
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11 FILES IN THE FILE LIST

=> s acetylgalactosaminyltransferase# or acetylgalactosamin? transferase# or
GalNAcT## or GalNAc(w)(T## or transferase#)

FILE 'MEDLINE'

824 ACETYL GALACTOSAMINYLTRANSFERASE#

4621 ACETYL GALACTOSAMIN?

64150 TRANSFERASE#

120 ACETYL GALACTOSAMIN? TRANSFERASE#

(ACETYL GALACTOSAMIN?(W) TRANSFERASE#)

61 GALNACT##

3234 GALNAC

13719285 T##

64150 TRANSFERASE#

368 GALNAC(W)(T## OR TRANSFERASE#)

L1 1016 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC(W)(T## OR TRANSFERASE#)

FILE 'SCISEARCH'

647 ACETYL GALACTOSAMINYLTRANSFERASE#

2947 ACETYL GALACTOSAMIN?

52104 TRANSFERASE#

128 ACETYL GALACTOSAMIN? TRANSFERASE#

(ACETYL GALACTOSAMIN?(W) TRANSFERASE#)

61 GALNACT##

2806 GALNAC

16951047 T##

52104 TRANSFERASE#

354 GALNAC(W)(T## OR TRANSFERASE#)

L2 914 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC(W)(T## OR TRANSFERASE#)

FILE 'LIFESCI'

132 ACETYL GALACTOSAMINYLTRANSFERASE#

1006 ACETYL GALACTOSAMIN?

16823 TRANSFERASE#

54 ACETYL GALACTOSAMIN? TRANSFERASE#

(ACETYL GALACTOSAMIN?(W) TRANSFERASE#)

18 GALNACT##

1011 GALNAC

1096593 T##

16823 TRANSFERASE#

88 GALNAC(W)(T## OR TRANSFERASE#)

L3 216 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC(W)(T## OR TRANSFERASE#)

FILE 'BIOTECHDS'

41 ACETYL GALACTOSAMINYLTRANSFERASE#

276 ACETYL GALACTOSAMIN?

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4748 TRANSFERASE#
21 ACETYL GALACTOSAMIN? TRANSFERASE#
   (ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
11 GALNACT##
182 GALNAC
134006 T##
4748 TRANSFERASE#
26 GALNAC (W) (T## OR TRANSFERASE#)
L4 83 ACETYL GALACTOSAMINYL TRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
   ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

FILE 'BIOSIS'
597 ACETYL GALACTOSAMINYL TRANSFERASE#
4335 ACETYL GALACTOSAMIN?
85436 TRANSFERASE#
154 ACETYL GALACTOSAMIN? TRANSFERASE#
   (ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
71 GALNACT##
3340 GALNAC
3674149 T##
85436 TRANSFERASE#
293 GALNAC (W) (T## OR TRANSFERASE#)
L5 865 ACETYL GALACTOSAMINYL TRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
   ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

FILE 'EMBASE'
590 ACETYL GALACTOSAMINYL TRANSFERASE#
4547 ACETYL GALACTOSAMIN?
47968 TRANSFERASE#
119 ACETYL GALACTOSAMIN? TRANSFERASE#
   (ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
57 GALNACT##
2934 GALNAC
10275961 T##
47968 TRANSFERASE#
344 GALNAC (W) (T## OR TRANSFERASE#)
L6 801 ACETYL GALACTOSAMINYL TRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
   ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

FILE 'HCAPLUS'
933 ACETYL GALACTOSAMINYL TRANSFERASE#
6318 ACETYL GALACTOSAMIN?
61460 TRANSFERASE#
182 ACETYL GALACTOSAMIN? TRANSFERASE#
   (ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
97 GALNACT##
3938 GALNAC
6126406 T##
61460 TRANSFERASE#
366 GALNAC (W) (T## OR TRANSFERASE#)
L7 1196 ACETYL GALACTOSAMINYL TRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
   ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

FILE 'NTIS'
1 ACETYL GALACTOSAMINYL TRANSFERASE#
31 ACETYL GALACTOSAMIN?
1509 TRANSFERASE#
3 ACETYL GALACTOSAMIN? TRANSFERASE#
   (ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
0 GALNACT##
12 GALNAC
2183136 T##

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1509 TRANSFERASE#
5 GALNAC (W) (T## OR TRANSFERASE#)
L8 9 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

FILE 'ESBIOBASE'
269 ACETYL GALACTOSAMINYLTRANSFERASE#
1261 ACETYL GALACTOSAMIN?
40390 TRANSFERASE#
53 ACETYL GALACTOSAMIN? TRANSFERASE#
(ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
48 GALNACT##
1739 GALNAC
6496740 T##
40390 TRANSFERASE#
220 GALNAC (W) (T## OR TRANSFERASE#)
L9 424 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

FILE 'BIOTECHNO'
282 ACETYL GALACTOSAMINYLTRANSFERASE#
1790 ACETYL GALACTOSAMIN?
16723 TRANSFERASE#
43 ACETYL GALACTOSAMIN? TRANSFERASE#
(ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
22 GALNACT##
1423 GALNAC
1630518 T##
16723 TRANSFERASE#
218 GALNAC (W) (T## OR TRANSFERASE#)
L10 421 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

FILE 'WPIDS'
37 ACETYL GALACTOSAMINYLTRANSFERASE#
417 ACETYL GALACTOSAMIN?
7952 TRANSFERASE#
32 ACETYL GALACTOSAMIN? TRANSFERASE#
(ACETYL GALACTOSAMIN? (W) TRANSFERASE#)
11 GALNACT##
306 GALNAC
14995133 T##
7952 TRANSFERASE#
62 GALNAC (W) (T## OR TRANSFERASE#)
L11 117 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

TOTAL FOR ALL FILES
L12 6062 ACETYL GALACTOSAMINYLTRANSFERASE# OR ACETYL GALACTOSAMIN? TRANSFER
ASE# OR GALNACT## OR GALNAC (W) (T## OR TRANSFERASE#)

=> s GlcNac or acetylglucosamin?
FILE 'MEDLINE'
5466 GLCNAC
16337 ACETYL GLUCOSAMIN?
L13 19145 GLCNAC OR ACETYL GLUCOSAMIN?

FILE 'SCISEARCH'
5428 GLCNAC
8125 ACETYL GLUCOSAMIN?
L14 11528 GLCNAC OR ACETYL GLUCOSAMIN?

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FILE 'LIFESCI'
    2053 GLCNAC
    3178 ACETYLGUCOSAMIN?
L15    4482 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'BIOTECHDS'
    510 GLCNAC
    999 ACETYLGUCOSAMIN?
L16    1321 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'BIOSIS'
    6083 GLCNAC
    12197 ACETYLGUCOSAMIN?
L17    15874 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'EMBASE'
    5247 GLCNAC
    10420 ACETYLGUCOSAMIN?
L18    13351 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'HCAPLUS'
    6942 GLCNAC
    19231 ACETYLGUCOSAMIN?
L19    23162 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'NTIS'
    11 GLCNAC
    37 ACETYLGUCOSAMIN?
L20    46 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'ESBIOBASE'
    2987 GLCNAC
    3452 ACETYLGUCOSAMIN?
L21    5336 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'BIOTECHNO'
    2403 GLCNAC
    4206 ACETYLGUCOSAMIN?
L22    5546 GLCNAC OR ACETYLGUCOSAMIN?

FILE 'WPIDS'
    575 GLCNAC
    1196 ACETYLGUCOSAMIN?
L23    1547 GLCNAC OR ACETYLGUCOSAMIN?

TOTAL FOR ALL FILES
L24    101338 GLCNAC OR ACETYLGUCOSAMIN?

=> s l12(8a)l24
FILE 'MEDLINE'
L25    42 L1 (8a)L13

FILE 'SCISEARCH'
L26    33 L2 (8a)L14

FILE 'LIFESCI'
L27    5 L3 (8a)L15

FILE 'BIOTECHDS'
L28    19 L4 (8a)L16

FILE 'BIOSIS'

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L29          20 L5 (8A)L17
FILE 'EMBASE'
L30          38 L6 (8A)L18
FILE 'HCAPLUS'
L31          50 L7 (8A)L19
FILE 'NTIS'
L32          0 L8 (8A)L20
FILE 'ESBIOBASE'
L33          23 L9 (8A)L21
FILE 'BIOTECHNO'
L34          22 L10(8A)L22
FILE 'WPIDS'
L35          23 L11(8A)L23
TOTAL FOR ALL FILES
L36          275 L12(8A) L24
=> s 136 not 2004-2008/py
FILE 'MEDLINE'
      2787642 2004-2008/PY
      (20040000-20089999/PY)
L37          39 L25 NOT 2004-2008/PY
FILE 'SCISEARCH'
      5176856 2004-2008/PY
      (20040000-20089999/PY)
L38          30 L26 NOT 2004-2008/PY
FILE 'LIFESCI'
      596361 2004-2008/PY
L39          4 L27 NOT 2004-2008/PY
FILE 'BIOTECHDS'
      110054 2004-2008/PY
L40          13 L28 NOT 2004-2008/PY
FILE 'BIOSIS'
      2419796 2004-2008/PY
L41          19 L29 NOT 2004-2008/PY
FILE 'EMBASE'
      2429049 2004-2008/PY
L42          34 L30 NOT 2004-2008/PY
FILE 'HCAPLUS'
      5609937 2004-2008/PY
L43          41 L31 NOT 2004-2008/PY
FILE 'NTIS'
      67564 2004-2008/PY
L44          0 L32 NOT 2004-2008/PY
FILE 'ESBIOBASE'
      1395895 2004-2008/PY
L45          21 L33 NOT 2004-2008/PY

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FILE 'BIOTECHNO'
      586 2004-2008/PY
L46      22 L34 NOT 2004-2008/PY

FILE 'WPIDS'
      4696424 2004-2008/PY
L47      4 L35 NOT 2004-2008/PY

TOTAL FOR ALL FILES
L48      227 L36 NOT 2004-2008/PY

=> s l12(15a)(gene/q or polynuc1? or nucleic)
FILE 'MEDLINE'
      12218 POLYNUCL?
      196963 NUCLEIC
L49      138 L1 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'SCISEARCH'
      11736 POLYNUCL?
      42453 NUCLEIC
L50      133 L2 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'LIFESCI'
      2888 POLYNUCL?
      16164 NUCLEIC
L51      80 L3 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'BIOTECHDS'
      24115 POLYNUCL?
      58561 NUCLEIC
L52      38 L4 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'BIOSIS'
      13181 POLYNUCL?
      70763 NUCLEIC
L53      188 L5 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'EMBASE'
      6381 POLYNUCL?
      42299 NUCLEIC
L54      128 L6 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'HCAPLUS'
      39684 POLYNUCL?
      211350 NUCLEIC
L55      393 L7 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'NTIS'
      1367 POLYNUCL?
      2342 NUCLEIC
L56      1 L8 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'ESBIODBASE'
      2058 POLYNUCL?
      32393 NUCLEIC
L57      106 L9 (15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

FILE 'BIOTECHNO'
      1992 POLYNUCL?
      19939 NUCLEIC
L58      99 L10(15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

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FILE 'WPIDS'
33041 POLYNUCL?
75825 NUCLEIC
L59 39 L11(15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

TOTAL FOR ALL FILES
L60 1343 L12(15A) (GENE/Q OR POLYNUCL? OR NUCLEIC)

=> s 148 and 160
FILE 'MEDLINE'
L61 6 L37 AND L49

FILE 'SCISEARCH'
L62 3 L38 AND L50

FILE 'LIFESCI'
L63 1 L39 AND L51

FILE 'BIOTECHDS'
L64 4 L40 AND L52

FILE 'BIOSIS'
L65 4 L41 AND L53

FILE 'EMBASE'
L66 3 L42 AND L54

FILE 'HCAPLUS'
L67 7 L43 AND L55

FILE 'NTIS'
L68 0 L44 AND L56

FILE 'ESBIOBASE'
L69 3 L45 AND L57

FILE 'BIOTECHNO'
L70 2 L46 AND L58

FILE 'WPIDS'
L71 0 L47 AND L59

TOTAL FOR ALL FILES
L72 33 L48 AND L60

=> dup rem 172
PROCESSING COMPLETED FOR L72
L73 16 DUP REM L72 (17 DUPLICATES REMOVED)

=> d tot

L73 ANSWER 1 OF 16 BIOTECHDS COPYRIGHT 2008 THE THOMSON CORP. on STN
TI New fusion protein comprising the activities of N-
acetylgalactosaminyltransferase, lactosyltransferase and
glucosyltransferase, useful for producing recombinant glycoproteins;
recombinant N-acetylgalactosaminyltransferase,
lactosyltransferase, glucosyltransferase, alpha-lactalbumin and
beta-N-acetylglucosaminyl-glycopeptide-beta-1,4-
galactosyltransferase fusion protein production by vector-mediated
gene transfer and expression in host cell for recombinant glycoprotein
production
AU DO S; LEE K; KANG Y

AN 2004-00578 BIOTECHDS
PI WO 2003089636 30 Oct 2003

L73 ANSWER 2 OF 16 MEDLINE on STN DUPLICATE 1
TI Initiation of mucin-type O-glycosylation in dictyostelium is homologous to the corresponding step in animals and is important for spore coat function.
SO The Journal of biological chemistry, (2003 Dec 19) Vol. 278, No. 51, pp. 51395-407. Electronic Publication: 2003-10-09.
Journal code: 2985121R. ISSN: 0021-9258.
AU Wang Fei; Metcalf Talibah; van der Wel Hanke; West Christopher M
AN 2003591916 MEDLINE

L73 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Molecular Cloning and Characterization of a Novel Human β 1,4-N-Acetylgalactosaminyltransferase, β 4GalNAc-T3, Responsible for the Synthesis of N,N'-Diacetyllactosediamine, GalNAc β 1-4GlcNAc
SO Journal of Biological Chemistry (2003), 278(48), 47534-47544
CODEN: JBCHA3; ISSN: 0021-9258
AU Sato, Takashi; Gotoh, Masanori; Kiyohara, Katsue; Kameyama, Akihiko; Kubota, Tomomi; Kikuchi, Norihiro; Ishizuka, Yasuko; Iwasaki, Hiroko; Togayachi, Akira; Kudo, Takashi; Ohkura, Takashi; Nakanishi, Hiroshi; Narimatsu, Hisashi
AN 2003:924958 HCAPLUS
DN 140:141493

L73 ANSWER 4 OF 16 MEDLINE on STN DUPLICATE 2
TI Molecular cloning and enzymatic characterization of a UDP-GalNAc: GlcNAc(beta)-R beta1,4-N-acetylgalactosaminyltransferase from *Caenorhabditis elegans*.
SO The Journal of biological chemistry, (2002 Sep 20) Vol. 277, No. 38, pp. 34924-32. Electronic Publication: 2002-07-11.
Journal code: 2985121R. ISSN: 0021-9258.
AU Kavar Ziad S; Van Die Irma; Cummings Richard D
AN 2002482934 MEDLINE

L73 ANSWER 5 OF 16 MEDLINE on STN
TI Complex gangliosides at the neuromuscular junction are membrane receptors for autoantibodies and botulinum neurotoxin but redundant for normal synaptic function.
SO The Journal of neuroscience : the official journal of the Society for Neuroscience, (2002 Aug 15) Vol. 22, No. 16, pp. 6876-84.
Journal code: 8102140. E-ISSN: 1529-2401.
AU Bullens Roland W M; O'Hanlon Graham M; Wagner Eric; Molenaar Peter C; Furukawa Keiko; Furukawa Koichi; Plomp Jaap J; Willison Hugh J
AN 2002424216 MEDLINE

L73 ANSWER 6 OF 16 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
TI Cloning and characterization of the gene family encoding the UDP-GalNAc:Polypeptide N- acetylgalactosaminyltransferases from *Drosophila melanogaster*.
SO Glycobiology, (October, 2001) Vol. 11, No. 10, pp. 882. print.
Meeting Info.: 6th Annual Conference of the Society for Glycobiology. San Francisco, California, USA. November 14-17, 2001.
ISSN: 0959-6658.
AU Ten Hagen, Kelly G. [Reprint author]; Tran, Duy [Reprint author]
AN 2001:553480 BIOSIS

L73 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Biosynthesis of heparan sulfate and the tumor suppressor EXT gene family
SO Tanpakushitsu Kakusan Koso (2000), 45(4), 579-586
CODEN: TAKKAJ; ISSN: 0039-9450

AU Kitagawa, Hiroshi; Sugahara, Kazuyuki
AN 2000:135558 HCAPLUS
DN 132:162654

L73 ANSWER 8 OF 16 MEDLINE on STN DUPLICATE 3
TI Differential expression of LacdiNAc sequences (GalNAc beta 1-4GlcNAc-R) in glycoproteins synthesized by Chinese hamster ovary and human 293 cells.
SO Glycobiology, (1997 Mar) Vol. 7, No. 2, pp. 183-94.
Journal code: 9104124. ISSN: 0959-6658.
AU Do K Y; Do S I; Cummings R D
AN 97280051 MEDLINE

L73 ANSWER 9 OF 16 MEDLINE on STN
TI Expression of beta 1-4 N-acetylgalactosaminyltransferase gene in the developing rat brain and retina: mRNA, protein immunoreactivity and enzyme activity.
SO Neurochemistry International, (1997 Jul) Vol. 31, No. 1, pp. 11-9.
Journal code: 8006959. ISSN: 0197-0186.
AU Daniotti J L; Rosales Fritz V M; Martina J A; Furukawa K; Maccioni H J
AN 97328644 MEDLINE

L73 ANSWER 10 OF 16 BIOTECHDS COPYRIGHT 2008 THE THOMSON CORP. on STN
TI Enzymatic oligosaccharide synthesis using soluble form of glycosyltransferase;
gene cloning, expression and protein secretion
AU Adler B; Weinstein J
AN 1996-13026 BIOTECHDS
PI US 5541083 30 Jun 1996

L73 ANSWER 11 OF 16 MEDLINE on STN
TI Genomic organization and chromosomal assignment of the human beta1, 4-N-acetylgalactosaminyltransferase gene. Identification of multiple transcription units.
SO The Journal of biological chemistry, (1996 Aug 23) Vol. 271, No. 34, pp. 20836-44.
Journal code: 2985121R. ISSN: 0021-9258.
AU Furukawa K; Soejima H; Niikawa N; Shiku H
AN 96355429 MEDLINE

L73 ANSWER 12 OF 16 BIOTECHDS COPYRIGHT 2008 THE THOMSON CORP. on STN
TI Transgenic animal expressing heterologous catalyst involved in metabolite production;
enzyme or catalytic antibody gene expression in transgenic mouse, rat, rabbit, pig, goat, sheep, horse or cattle milk, for oligosaccharide, glycoprotein or glycolipid production
AU Prieto P A; Smith D F; Cummings R D; Kopchik J J; Mukerji P; Moremen K W; Pierce J M
AN 1995-14655 BIOTECHDS
PI WO 9524488 14 Sep 1995

L73 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Recent progress of molecular cloning studies on glycosyltransferases
SO Sen'i Gakkaishi (1993), 49(10), P373-P382
CODEN: SENGA5; ISSN: 0037-9875
AU Narimatsu, Hisashi
AN 1994:1510 HCAPLUS
DN 120:1510

L73 ANSWER 14 OF 16 BIOTECHDS COPYRIGHT 2008 THE THOMSON CORP. on STN
TI Isolation of a gene conveying a post-translational characteristic; mammal glycosyltransferase gene cloning and expression; DNA sequence; glycosylation

AN 1991-13820 BIOTECHDS
PI WO 9112340 22 Aug 1991

L73 ANSWER 15 OF 16 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN
TI BIOSYNTHESIS OF MAMMALIAN GLYCO PROTEINS GLYCOSYLATION PATHWAYS IN THE
SYNTHESIS OF THE NONREDUCING TERMINAL SEQUENCES.
SO Journal of Biological Chemistry, (1979) Vol. 254, No. 24, pp. 12531-12541.
CODEN: JBCHA3. ISSN: 0021-9258.
AU BEYER T A [Reprint author]; REARICK J I; PAULSON J C; PRIEELS J-P; SADLER
J E; HILL R L
AN 1980:224938 BIOSIS

L73 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Biosynthesis of mammalian glycoproteins. Glycosylation pathways in the
synthesis of the nonreducing terminal sequences
SO Journal of Biological Chemistry (1979), 254(24), 12531
CODEN: JBCHA3; ISSN: 0021-9258
AU Beyer, Thomas A.; Rearick, James I.; Paulson, James C.; Prieels, Jean
Paul; Sadler, J. Evan; Hill, Robert L.
AN 1980:17842 HCAPLUS
DN 92:17842
OREF 92:3030h,3031a

=> d ab 8,11

L73 ANSWER 8 OF 16 MEDLINE on STN DUPLICATE 3
AB The lactiNac sequence GalNac beta 1-->4GlcNac beta 1-R occurs in the N-
and O-glycans of many glycoproteins in vertebrate and invertebrates. We
now report that both human 293 cells and Chinese hamster ovary (CHO) cells
contain a UDPGalNac:GlcNac beta 1,4 N-
acetylgalactosaminyltransferase (beta 1,4GalNacT) that forms the
lactiNac sequence. The beta 1,4GalNacT in CHO cells is distinct
from beta 1,4 galactosyltransferase in that the latter enzyme, but not the
former, binds to a column of immobilized bovine alpha-lactalbumin. To
determine whether endogenous glycoproteins in these cells contain lactiNac
sequences, glycoproteins from 293 cells, CHO and Lec8 CHO cells were
desialylated and passed over immobilized Wisteria floribunda agglutinin
(WFA), a plant lectin with affinity for terminal GalNac residues. WFA
bound to approximately 120 and approximately 80 kDa glycoproteins in 293
cells and glycans from these glycoproteins contained lactiNac sequences.
The approximately 120 kDa glycoproteins in 293 cells bound by WFA is a
mixture of both the lysosome-associated membrane glycoproteins LAMPs-1 and
-2. WFA bound to two glycoproteins of approximately 47 and approximately
78 kDa in Lec8 CHO cells, but these glycoproteins are not LAMPs and they
do not contain the lactiNac sequence. Instead, they contain multiple
GalNac alpha-Ser/Thr O-glycans that promote binding to WFA. Thus, the
beta 1,4GalNacT in 293 cells displays a limited specificity in its
recognition of acceptors, whereas the beta 1,4GalNacT in CHO cells fails
to promote synthesis of the cognate lactiNac sequence. The presence of
the beta 1,4GalNacT may not be sufficient for synthesis of lactiNac
sequences and other factors may contribute to regulate the functionality
of the enzyme.

L73 ANSWER 11 OF 16 MEDLINE on STN
AB The beta1,4-N-acetylgalactosaminyltransferase (beta1,4GalNac-T)
(EC) gene is expressed in normal brain tissues and in various
malignant transformed cells, such as malignant melanoma, neuroblastoma,
and adult T cell leukemia. To analyze the regulatory mechanisms of gene
expression, we determined the genomic organization of the beta1,4GalNac-T
gene. The gene consists of at least 11 exons and spans >8 kilobase pairs.

The coding region is located in exons 2-11. To determine the transcription initiation sites, 5'-rapid amplification of cDNA ends analysis and ribonuclease protection assays were performed using RNA obtained from the human melanoma cell line SK-MEL-31. Consequently, we defined three transcription initiation sites and the alternative usage of three exons. Exons 1a and 1b partially overlap; the latter is part (3'-side) of the former and corresponds to the 5'-noncoding region of the cDNA clone previously isolated. The third transcript, exon 1c, corresponds to nucleotides -520 to -412 (position +1 = A of ATG of beta1,4GalNAc-T cDNA), which are considered to be in intron 1 based on the cloned cDNA sequence. Ribonuclease protection assays revealed the corresponding protection bands in samples of the gene-expressing cell lines. 5'-Flanking regions of individual initiation sites showed promoter activity when analyzed by chloramphenicol acetyltransferase assay in SK-MEL-31 cells. The multiple transcription initiation sites and their promoters/enhancers identified here might be differentially involved in the cell type-specific expression of the beta1,4GalNAc-T gene. This gene was assigned to human chromosome 12q13.3 by means of fluorescence in situ hybridization.

```
=> fil .becpat
COST IN U.S. DOLLARS
```

SINCE FILE	TOTAL
ENTRY	SESSION
95.19	95.61

```
FULL ESTIMATED COST
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```
FILES 'BIOTECHDS, HCAPLUS, WPIDS' ENTERED AT 12:21:03 ON 17 APR 2008
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.
```

```
3 FILES IN THE FILE LIST
```

```
=> s (136 and 160) and wo/pc and py>=2004 and pry<=2003 range=2004,
FILE 'BIOTECHDS'
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    25169 WO/PC
    110044 PY>=2004
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L74      0 (L28 AND L52) AND WO/PC AND PY>=2004 AND PRY<=2003
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    307001 WO/PC
    5197490 PY>=2004
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L75      1 (L31 AND L55) AND WO/PC AND PY>=2004 AND PRY<=2003
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    544338 WO/PC
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    1514001 PRY<=2003
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L76      0 (L35 AND L59) AND WO/PC AND PY>=2004 AND PRY<=2003
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TOTAL FOR ALL FILES
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L77      1 (L36 AND L60) AND WO/PC AND PY>=2004 AND PRY<=2003
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=> d
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L77  ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS ON STN
TI   Cloning, characterization and sequence of  $\beta$ 1,4-N-
      acetylgalactosaminyltransferase from Caenorhabditis elegans and
      use for production of glycoproteins and glycopeptides
```

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

IN Cummings, Richard D.; Kavar, Ziad

AN 2004:252654 HCAPLUS

DN 140:283378

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2004024938	A2	20040325	WO 2003-US28833	20030912 <--
	WO 2004024938	A3	20040722		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003270645	A1	20040430	AU 2003-270645	20030912 <--
	US 20040086995	A1	20040506	US 2003-661430	20030912 <--

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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114.54

STN INTERNATIONAL LOGOFF AT 12:23:38 ON 17 APR 2008